

CASE STUDY

EZflow System Brings Church Camp into Regulatory Compliance

Lebanon, MO

SYSTEM SPECIFICATIONS

3,000 GPD Wastewater Treatment System

INSTALLATION DATE

2007

PRODUCTS

EZflow®

ENGINEER

Dickman Professional Engineering Services, Osage Beach, MO

INSTALLER

Leonard Construction, Lebanon, MO

DISTRIBUTOR

Winnelson, Lebanon, MO

DESCRIPTION

Cedar Camp is a church camp on approximately 800 acres in LaClede County Missouri, that hosts children from all over the world during the summertime. Committed to the environment and providing the best possible camping experience, the camp is continuously expanding and making improvements. The camp includes a main house and two bunk houses with wastewater flow of 3,000 GPD. The original wastewater treatment system consisted of an open discharge system that sent wastewater running over a hill. The Missouri Department of Natural Resources and LaClede County required a clean up of the site and an engineered replacement system that would bring the camp's wastewater treatment to commercial property standards.

A challenge for system engineers was a lack of available aggregate for a traditional low-pressure system and the impact heavy trucks may have on the camp's infrastructure and roads. There was also concern regarding air quality at the camp which could be compromised by the dust from trucks delivering the gravel. The team looked for an alternative solution that would provide a commercial level of treatment and address these concerns.



The resulting gravelless design includes six large concrete septic tanks and 3,000 lineal feet of Low Pressure Pipe running through an EZflow by Infiltrator 1201P-GEO system. EZflow is an environmentally friendly replacement to traditional stone and pipe drainfields using an engineered geosynthetic aggregate modular design. The EZflow system is designed to improve drainfield performance by eliminating fines and reducing compaction and embedment associated with stone. The modular, bundled configuration of EZflow makes installation fast and easy in most septic drainfield applications.



A pressurized system was required by the County because the system size was over 500 feet.

The first of a possible three systems of equal size to be designed and installed at Camp Cedar, the wastewater treatment system serves the main house and two of the bunk houses at the camp. The system incorporates four zones controlled by a splitter valve for equal distribution.

